



Bellwork: 11/18/11

$$f(x) = x^2 + 1$$

$$g(x) = x - 4$$

Find  $g(f(x))$

$$g(x^2 + 1)$$

$$(x^2 + 1) - 4$$

$$x^2 + 1 - 4$$

$$x^2 - 3$$

$$\frac{15 + (5 \times 2)}{(7 - 2)} - 2^4 \div 4$$

$$\frac{15 + 10}{5} - 16 \div 4$$

$$\frac{25}{5} - 4$$

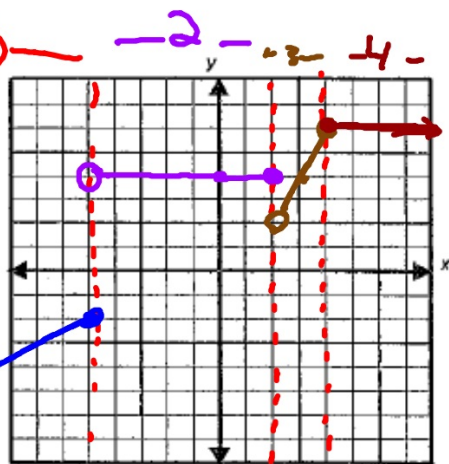
$$5 - 4 = 1$$

Y

$$2. f(x) = \begin{cases} \frac{3}{5}x + 1 & \text{if } x \leq -5 \\ 4 & \text{if } -5 < x \leq 2 \\ 2x - 2 & \text{if } 2 < x \leq 4 \\ 6 & \text{if } \underline{x > 4} \end{cases}$$

(1)  
(2)  
(3)  
(4)

$$\frac{3}{5}x + 1$$



$$2x - 2$$

$$3. f(x) = \begin{cases} -3x+5 & \text{if } x \leq -1 \\ 5 & \text{if } -1 < x < 4 \\ \frac{1}{2}x-3 & \text{if } 4 \leq x \leq 6 \end{cases}$$

